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(71) Applicant and

(72) Inventor: FISENKO, Anatoliy [CA/CA]; 625 Evans Ave., Suite 907, Toronto, Ontario M8W 2W5 (CA).

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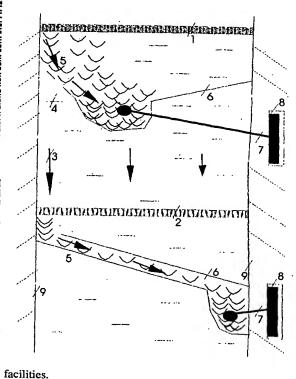
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[Continued on next page]

## (54) Title: A METHOD OF WATER PURIFICATION BY INDUCED FROTH (FOAM) FORMATION



(57) Abstract: A method of induced froth (foam) formation and natural purification from pollutants or contaminants for water treatment, wastewater treatment, clean-up of polluted sites of streams directly on site, clean-up of contaminated sites and any other reasons is proposed. The method utilizes the proper selected food for degrading and decomposing activities by groups of fungi, bacteria and other microorganisms which are the most resistant to the kinds of contaminants or pollutants from which water, wastewater and polluted or contaminated sites are treated or cleaned-up. While the decomposition takes place, the entire water and/or benthic soil are enriched with biological surfactants and the generated dissolved biogases and micro-bubbles of biogases. Further, the water, wastewater and polluted or contaminated sites also contain the dissolved air and all kinds of polluting particles, including man-made surfactants. By creating the proper external and/or internal conditions for forming biogases and/or air micro-bubbles and bubbles-particles aggregates in the presence of biological and/or man-made surfactants, the latter rise to the water surface and concentrate in froth and a surrounding thin top layer of surface water. The froth and surrounding thin top layer of surface water collect the contaminants or pollutants, including organic and inorganic particles with pathogens from the entire water and/or benthic soil. The froth and surrounding think top layer of surface water are concentrated and localized in the proper designed places by any devices or equipments for further skimming off for disposal and/or redirecting to artificially created places for natural treatment directly on site and/or delivering to municipal or natural treatment

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